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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Group Art Unit: 2192
	:	Examiner: J. J. Romano
Arnold J. Daks et al.	:	Intellectual Property
Serial No: 09/566,004	:	Law Department - 4054
Filed: 08/28/001	:	International Business
Title: A COMPUTER CONTROLLED	:	Machines Corporation
DISPLAY SYSTEM FOR TRACKING	:	11400 Burnet Road
THE DEVELOPMENT OF SOFTWARE	:	Austin, Texas 78758
PRODUCTS HAVING A PLURALITY	:	Customer No. 32,329
OF DEVELOPMENT LINES THROUGH	:	
THE MONITORING OF SEQUENCES	:	
OF CHECKPOINTS RESPECTIVELY	:	
IN SAID LINES	:	
Date:	:	

CERTIFICATE OF MAILING

I hereby certify that this correspondence including a Brief on Appeal (in triplicate), and this transmittal letter (duplicate) is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on ________03_06_06____.

J& Roff 3/06/0	/ 26
Signature Date	<u> </u>

TRANSMITTAL OF APPELLANTS' BRIEF UNDER 37 CFR 1.192(a)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir:

Attached is Appellants' Brief (in triplicate) in this Appeal from a decision of the Examiner dated October 6, 2005 finally rejecting claims 1-31.

Please charge our Deposit Account No. 09-0447 in the amount of \$500.00 for the Appeal Brief fee. (a duplicate of this transmittal is included.)

The Commissioner is hereby authorized to charge any additional fee which may be required or credit any overpayment to Deposit Account No. 09-0447.

Respectfully submitted 03|06|06 B. Kraft J./ Actorney for Applicants Registration No. 19,226 (512) 473-2303

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Date:

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PATENT 09/966,004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE In re application of: : Group Art Unit: 2192 Examiner: J. J. Romano : Arnold J. Daks et al. : Intellectual Property Serial No: 09/666,004 : Law Department - 4054 Filed: 08/28/001 • International Business Title: A COMPUTER CONTROLLED : Machines Corporation DISPLAY SYSTEM FOR TRACKING : 11400 Burnet Road THE DEVELOPMENT OF SOFTWARE : Austin, Texas 78758 PRODUCTS HAVING A PLURALITY : Customer No. 32,329 OF DEVELOPMENT LINES THROUGH : THE MONITORING OF SEQUENCES : OF CHECKPOINTS RESPECTIVELY : IN SAID LINES

BRIEF ON APPEAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir:

This is an Appeal from the Final Rejection of Claims 1-31 of this Application. An Appendix containing a copy of each of the Claims is attached.

I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

II. Related Appeals and Interferences None

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III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 31 claims in this Application.

B. STATUS OF ALL THE CLAIMS

- 1. Claims cancelled: None.
- Claims withdrawn from consideration but not cancelled: None.
- 3. Claims pending: 1-31.
- 4. Claims allowed: None.
- 5. Claims rejected: 1-31.

C. CLAIMS ON APPEAL

Claims on appeal: Claims 1-31.

IV. Status of Amendment

No amendments have been filed after Final Rejection.

V. Summary of Invention

Claim 1 which is annotated with respect to the Specification and Drawings has the same elements as all of the independent claims herein: 1, 8, 15, 22, 25, 28, and 31.

 A computer controlled display system (Fig. 3, described on Page 9, lines 3-18, for tracking the development of complex software products having a plurality of developmental lines (Fig. 3 lines 51, described on page 9, line 32 to page 10, line 5) comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints; (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13)

means for tracking each of said developmental lines to determine the reached checkpoints; (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18); and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4).

In addition, dependent claims 6, 13, and 20, to be argued separately, set forth an implementation: when the checkpoints are modified, the modification may involve switching of actions from one of the plurality of lines to another (page 11, lines 9-11, referring to Fig. 6 and page 12, lines 9-12, referring to Fig. 9, steps 76-78).

Dependent claims 23, 24, 26, 27, 29, and 30, to be argued separately, describe an implementation wherein a set of attributes of the checkpoint are displayed at the checkpoint (page 12, lines 7-9 referring to Fig. 9, step 76).

Dependent claims 7, 14, and 21 to be argued separately set forth a limitation wherein the means for tracking are remote from the display on which the plurality of lines are displayed (page 7, lines 7-12 referring to Fig. 10

VI. Grounds of Rejection

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are rejected as anticipated under 35 USC 102(b) by Song et al. US5,949,999. Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are

rejected as obvious over Song et al. under 35 U.S.C. 103(a).

Claims 7, 14, and 21 are rejected as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

VII. Argument

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999.

Song is not an anticipatory reference under 35 USC 102. In order to reject under 35 USC 102, the reference must teach every element of the invention without modification. Applicants submit that Song does not do this. The present invention claims the combination, in tracking the development of software products, (as set forth in claim 1) of means for setting and displaying a sequence of checkpoints in each of a plurality of developmental lines and means for determining which checkpoints have reached in each developmental line and indicating the reached checkpoints on the simultaneous display of a plurality developmental development lines. While Song is concerned with software development and may permit user access to what may be considered developmental lines, Song does not appear to be concerned with a collective display of a plurality of

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developmental lines each with indicated reached and unreached checkpoints.

<u>Please consider typical claim 1 in this connection:</u>

1. A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines comprising: means for <u>setting in each of said plurality of</u> <u>developmental lines, a sequence of checkpoints;</u> means for <u>tracking each</u> of said developmental lines <u>to</u> <u>determine the reached checkpoints</u>; and means for <u>simultaneously displaying</u> said plurality of developmental lines and <u>indicating said reached checkpoints</u>.

Song does not teach setting in each of a plurality of developmental lines a sequence of checkpoints. The Examiner points to col 3, lines 57 and 58. This a very vague citation. It deals with a procedure for producing software documents for a software development and testing process. There is some very general statement about defining procedures and documents required during the project execution. It is submitted that such a vague and general statement does not meet the 35 USC 102 requirement that the reference has to teach without modification the claimed element: "setting in each of said plurality of developmental lines, a sequence of checkpoints"

The Examiner also cites Fig. 3 in Song for this teaching. Fig. 3 has a very short and general description of the measurement of a variety of elements in a software support document at various stages in the development of a product component, and little else. It is not seen what the Examiner regards as his check points. Does the Examiner intend that every element of every stage in the development of the product component is a check point? Is so, how is

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"tracking each of said developmental lines to determine the reached_checkpoints" carried out in Song 's Fig. 3 which the Examiner also cites for disclosing this last element?

The Examiner cites col 3, lines 58-62 as teaching this setting of check points. At best this section state that a marked or designated activity indicates that the software support document for that activity is available. As stated in col 2, lines 8-23, these support software documentation is often required by law. It is submitted that indicating the existence of documentation for a given activity at a given phase of a single component is not "simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints". Figure 3 in Song at most shows stages in the documentation, of a single developmental line and does not disclose the tracking check point stages in a plurality of developmental lines.

Examiner's Argument:

The Examiner insists that Fig. 3 of Song shows the tracking of check points simultaneously in multiple product developmental lines. In order to read Song on the claims, the Examiner argues (in the bottom paragraph of the final rejection) that there are several components listed in Fig. 2, e.g. Systems Functions, Patient and File Functions, ... Filming, etc., and that the multiple check points of this plurality of components are then tracked in the columns of Fig. 3. The description in Song does not support such an connection and interpretation of Fig. 2 with respect to Fig. 3. Applicants submit Fig. 3 shows the documentation at multiple development stages of a single component or product. Col 4, lines 53-55, indicates that the Fig. 3 relates to the status of documentation of a highlighted selected component. "Each column in the panel shows the AUS920000234US1 6

status of the documentation within one development phase" (col 4, lines 59-60). It is submitted that each column represents one development phase of a one component, and that all of the columns in Fig. 3 collectively represent several developmental stages of that component. Each column represents a list of the documents which may be available for that Stage (column). A reading of the headings in Fig. 3 would make it clear to one skilled in the art that anything analogous to a product development line would be progressing in the header (X-axis) direction sequence: Requirement > Concept > Design > Implementation > Integration as the development line progressed.

It is submitted that, for the reasons set forth hereinabove, the Examiner's difficult interpretation of the general and vague disclosure of Song does not meet the very specific requirements of 35 USC 102 that the reference must clearly teach every element of the invention without modification. It is submitted that Song fails to disclose every element of the invention without modification as required for a rejection under 35 USC 102 of claims 1-5, 8-12, 15-19, 22, 25 and 28.

The rejection of claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 as obvious over Song et al under 35 U.S.C. 103(a) is also respectfully traversed.

Dependent claims 6, 13, and 20 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation when modifying the actions required of checkpoints, the modification may include switching of the actions to other of said plurality of developmental lines. The Examiner concedes that Song does not disclose this but relies on some vague statements

in Song about changes to contend that such switching is suggested by Song. Applicants can find nothing in Song related to switching of attributes and action between developmental lines. Further, it is submitted that the reason such switching in the present invention may be interactively easily done is that all of the plurality of lines are simultaneously displayed. In Song, e.g. Fig. 3, each of the development lines are individually displayed with a description devoid of any suggestion that attributes or actions may be switched to other unseen developmental lines. Examiner admits that Song does not expressly disclose switching to other development lines but argues that such switching would be obvious. Applicants submit that in view of the vagueness of the Song disclosure, such switching is far from obvious.

Claims 23, 24, 26, 27, 29, and 30 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these set forth an implementation wherein a set of attributes of a checkpoint may be displayed at the checkpoint. The Examiner argues that this is suggested by Fig. and col 4, lines 50-55 in Song. However, the Examiner has already contended that each of the thirty five status boxes in Song's Fig. 3 were checkpoints with Yes/No indicators as to whether the documentation had been developed. The Examiner can not argue now that the same status boxes are now a display of attributes for the thirty five listed status boxes. There is no additional display of attributes in Song as described in the specification of the present invention.

The rejection of claims 7, 14, and 21 as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a) is also respectfully traversed.

Claims 7, 14, and 21 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation that the means for tracking are remote from the display on which the plurality of product line are displayed and the tracking means communicate the tracked data to the display system where the tracked data is stored. Since Song does not disclose this, the Examiner goes to a combination with Hopwood. In the data tracking and management system of Hopwood, even if the data tracking could arguably be said to be remote from the display on which the data is shown, there appears to be no suggestion that the tracked data is stored in association with this display. In Hopwood, the data tracked remotely from the display appears to also be stored remotely from the display.

Accordingly, it is submitted that Song even when combined with Hopwood still does not suggest the invention defined in claims 7, 14, and 21.

<u>Conclusion</u>

In view of the foregoing, it is submitted that: Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999; Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are unobvious over Song et al. under 35 U.S.C. 103(a); and Claims 7, 14, and 21 are unobvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

Accordingly, the Board of Appeals is respectfully requested to reverse the final rejection and find claims 1-31 in condition for allowance.

Respectfully submitted

Attorney for Applicants Registration No. 19,226 (512) 473-2303

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VIII. Claims on Appeal (Appendix)

1 1. A computer controlled display system for tracking the development of complex software products having a plurality 2 3 of developmental lines comprising: means for setting in each of said plurality of 4 5 developmental lines, a sequence of checkpoints; 6 means for tracking each of said developmental lines to determine the reached checkpoints; and 7 8 means for simultaneously displaying said plurality of 9 developmental lines and indicating said reached checkpoints. The computer controlled display system of claim 1 1 2. 2 further including: 3 means for modifying said developmental lines and said 4 checkpoints; and 5 means for displaying said modifications. 1 3. The computer controlled display system of claim 2 2 further including means for displaying at each of said 3 checkpoints, a set of developmental attributes for said 4 checkpoint. 1 4. The computer controlled display system of claim 3 2 further including: 3 means for modifying said developmental attributes for each of said checkpoints; and 4 5 means for displaying said modifications at each of said 6 checkpoints.

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1 5. The computer controlled display system of claim 3 2 wherein said developmental attributes include actions 3 performed in said software product development. 1 6. The computer controlled display system of claim 5 2 wherein said means for modifying said actions switch said 3 actions to other of said developmental lines. 1 The computer controlled display system of claim 2 7. 2 wherein: 3 said means for tracking are remote from said means for 4 displaying, 5 and said system further includes: 6 means for storing, in association with said means for 7 displaying, the data tracked by said means for tracking; and 8 means for communicating the data tracked to said means 9 for storing. 1 A method for tracking the development of complex 8. 2 software products having a plurality of developmental lines 3 on a computer controlled display comprising: 4 setting in each of said plurality of developmental lines, a sequence of checkpoints; 5 6 tracking each of said developmental lines to determine 7 the reached checkpoints; and 8 simultaneously displaying said plurality of 9 developmental lines and indicating said reached checkpoints. 1 9. The method for tracking of claim 8 further including the 2 steps of: 3 modifying said developmental lines and said 4 checkpoints; and 5 displaying said modifications. AUS920000234US1 12

10. The method for tracking of claim 9 further including
 the step of displaying at each of said checkpoints, a set of
 developmental attributes for said checkpoint.

1 11. The method for tracking of claim 10 further including
 2 the steps of:

3 modifying said developmental attributes of a plurality
4 of said checkpoints; and

5 displaying said modifications at each of said modified6 checkpoints.

1 12. The method for tracking of claim 10 wherein said
 2 developmental attributes include actions performed in said
 3 software product development.

13. The method for tracking of claim 12 wherein said step
 of modifying said actions switches said actions to other of
 said developmental lines.

14. The method for tracking of claim 9 wherein:
 said step of tracking is carried out remote from said
 displaying step,

4 and further including the steps of:

storing, in association with said displaying step, the
data tracked in said tracking step; and

7 communicating the data tracked to said storing step.

A computer program having code recorded on a computer 1 15. 2 readable medium for tracking, on a computer controlled display, the development of complex software products having 3 a plurality of developmental lines comprising: 4 means for setting in each of said plurality of 5 developmental lines, a sequence of checkpoints; 6 means for tracking each of said developmental lines to 7 determine the reached checkpoints; and 8 means for simultaneously displaying said plurality of 9 developmental lines and indicating said reached checkpoints. 10 The computer program of claim 15 further including: 16. 1 means for modifying said developmental lines and said 2 checkpoints; and 3 means for displaying said modifications. 4 The computer program of claim 16 further including 1 17. means for displaying at each of said checkpoints, a set of 2 developmental attributes for said checkpoint. 3 The computer program of claim 17 further including: 1 18. 2 means for modifying said developmental attributes for each of said checkpoints; and 3 means for displaying said modifications at each of said 4 5 checkpoints. The computer program of claim 17 wherein said 1 19. developmental attributes include actions performed in said 2 3 software product development. The computer program of claim 19 wherein said means for 20. 1 modifying said actions switch said actions to other of said 2

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3 developmental lines.

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21. The computer program of claim 16 wherein: 1 said means for tracking are remote from said means for 2 displaying, 3 and said system further includes: 4 means for storing, in association with said means for 5 displaying, the data tracked by said means for tracking; and 6 means for communicating the data tracked to said means 7 8 for storing. A computer controlled display system for tracking the 22. 1 building of a program product from a functional 2 implementation stage to a complete integrated program 3 product comprising: 4 a plurality of developmental lines respectively 5 corresponding to each of a plurality of program components 6 to be integrated into said complete program product; 7 means for setting in each of said plurality of 8 developmental lines, a sequence of checkpoints; 9 means for tracking each of said developmental lines to 10 determine the reached checkpoints; and 11 means for simultaneously displaying said plurality of 12 developmental lines and indicating said reached checkpoints. 13 The computer controlled display system of claim 22 1 23. further including means for displaying at each of said 2 checkpoints, a set of attributes for said checkpoint related 3 to the compatibility functions of said checkpoint line. 4

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The computer controlled display system of claim 23 24. 1 2 further including: means for modifying said attributes for each of said 3 checkpoints; and 4 means for displaying said modifications at each of said 5 6 checkpoints. A method for tracking, on a computer controlled 1 25. display, the building of a program product from a functional 2 implementation stage to a complete integrated program 3 4 product comprising: setting up a plurality of developmental lines 5 respectively corresponding to each of a plurality of program 6 components to be integrated into said complete program 7 8 product; setting up in each of said plurality of developmental 9 lines, a sequence of checkpoints; 10 tracking each of said developmental lines to determine 11 the reached checkpoints; and 12 simultaneously displaying said plurality of 13 developmental lines and indicating said reached checkpoints. 14 The method for tracking of claim 25 further including 1 26. the step of displaying at each of said checkpoints, a set of 2 attributes for said checkpoint related to the compatibility 3 functions of said checkpoint line. 4 The method for tracking of claim 26 further including 27. 1 2 the steps of: modifying said attributes for each of said checkpoints; 3 4 and displaying said modifications at each of said 5 checkpoints. 6

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1 28. A computer program having code recorded on a computer readable medium for tracking, on a computer controlled 2 display, the building of a program product from a functional 3 4 implementation stage to a complete integrated program 5 product comprising: means for tracking a plurality of developmental lines 6 respectively corresponding to each of a plurality of program 7 8 components to be integrated into said complete program 9 product; 10 means for setting in each of said plurality of developmental lines, a sequence of checkpoints; 11 means for determining the reached checkpoints in each 12 of said plurality of developmental lines; and 13 means for simultaneously displaying said plurality of 14 15 developmental lines and indicating said reached checkpoints. The computer program of claim 28 further including 1 29. means for displaying at each of said checkpoints, a set of 2 attributes for said checkpoint related to the compatibility 3 functions of said checkpoint line. 4 The computer program of claim 29 further including: 1 30. 2 means for modifying said attributes for each of said

3 checkpoints; and

4 means for displaying said modifications at each of said 5 checkpoints.

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31. A method for tracking the development of complex software products having a plurality of developmental lines on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints;

tracking each of said developmental lines to determine the reached checkpoints;

modifying said developmental lines and said checkpoints including the switching of an action required at the checkpoint to a checkpoint in another developmental line;

simultaneously displaying, remote from said tracking, said plurality of developmental lines indicating said reached checkpoints, and modifications to said developmental lines and said checkpoints;

storing, in association with said displaying step, the data tracked in said tracking step; and

communicating the data tracked to said storing step.

IX. Evidence

There is no evidence presented.

X. Related Proceedings

None



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PATENT 09/966,004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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	:	Examiner: J. J. Romano		
Arnold J. Daks et al.	:	Intellectual Property		
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Title: A COMPUTER CONTROLLED	:	Machines Corporation		
DISPLAY SYSTEM FOR TRACKING	:	11400 Burnet Road		
THE DEVELOPMENT OF SOFTWARE	:	Austin, Texas 78758		
PRODUCTS HAVING A PLURALITY	:	Customer No. 32,329		
OF DEVELOPMENT LINES THROUGH	:			
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OF CHECKPOINTS RESPECTIVELY	:			
IN SAID LINES , / ,	:			
Date: <u>3/06/06</u>	:			
/ /				

BRIEF ON APPEAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Appeal from the Final Rejection of Claims 1-31 of this Application. An Appendix containing a copy of each of the Claims is attached.

I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

II. Related Appeals and Interferences None

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III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 31 claims in this Application.

B. STATUS OF ALL THE CLAIMS

- 1. Claims cancelled: None.
- 2. Claims withdrawn from consideration but not cancelled: None.
- 3. Claims pending: 1-31.
- 4. Claims allowed: None.
- 5. Claims rejected: 1-31.

C. CLAIMS ON APPEAL

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Claims on appeal: Claims 1-31.

IV. Status of Amendment

No amendments have been filed after Final Rejection.

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V. Summary of Invention

Claim 1 which is annotated with respect to the Specification and Drawings has the same elements as all of the independent claims herein: 1, 8, 15, 22, 25, 28, and 31.

 A computer controlled display system (Fig. 3, described on Page 9, lines 3-18, for tracking the development of complex software products having a plurality of developmental lines (Fig. 3 lines 51, described on page 9, line 32 to page 10, line 5) comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints; (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13)

means for tracking each of said developmental lines to determine the reached checkpoints; (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18); and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4).

In addition, dependent claims 6, 13, and 20, to be argued separately, set forth an implementation: when the checkpoints are modified, the modification may involve switching of actions from one of the plurality of lines to another (page 11, lines 9-11, referring to Fig. 6 and page 12, lines 9-12, referring to Fig. 9, steps 76-78).

Dependent claims 23, 24, 26, 27, 29, and 30, to be argued separately, describe an implementation wherein a set of attributes of the checkpoint are displayed at the checkpoint (page 12, lines 7-9 referring to Fig. 9, step 76).

Dependent claims 7, 14, and 21 to be argued separately set forth a limitation wherein the means for tracking are remote from the display on which the plurality of lines are displayed (page 7, lines 7-12 referring to Fig. 10

VI. Grounds of Rejection

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are rejected as anticipated under 35 USC 102(b) by Song et al. US5,949,999. Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are rejected as obvious over Song et al. under 35 U.S.C. 103(a). Claims 7, 14, and 21 are rejected as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

VII. Argument

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999.

Song is not an anticipatory reference under 35 USC 102. In order to reject under 35 USC 102, the reference must teach every element of the invention without modification. Applicants submit that Song does not do this. The present invention claims the combination, in tracking the development of software products, (as set forth in claim 1) of means for setting and displaying a sequence of checkpoints in each of a plurality of developmental lines and means for determining which checkpoints have reached in each developmental line and indicating the reached checkpoints on the simultaneous display of a plurality developmental development lines. While Song is concerned with software development and may permit user access to what may be considered developmental lines, Song does not appear to be concerned with a collective display of a plurality of

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developmental lines each with indicated reached and unreached checkpoints.

<u>Please consider typical claim 1 in this connection:</u>

1. A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines comprising: means for <u>setting in each of said plurality of</u> <u>developmental lines, a sequence of checkpoints;</u> means for <u>tracking each of said developmental lines to</u> <u>determine the reached checkpoints;</u> and means for <u>simultaneously displaying</u> said plurality of <u>developmental lines and indicating said reached checkpoints</u>.

Song does not teach setting in each of a plurality of developmental lines a sequence of checkpoints. The Examiner points to col 3, lines 57 and 58. This a very vague citation. It deals with a procedure for producing software documents for a software development and testing process. There is some very general statement about defining procedures and documents required during the project execution. It is submitted that such a vague and general statement does not meet the 35 USC 102 requirement that the reference has to teach without modification the claimed element: "setting in each of said plurality of developmental lines, a sequence of checkpoints"

The Examiner also cites Fig. 3 in Song for this teaching. Fig. 3 has a very short and general description of the measurement of a variety of elements in a software support document at various stages in the development of a product component, and little else. It is not seen what the Examiner regards as his check points. Does the Examiner intend that every element of every stage in the development of the product component is a check point? Is so, how is

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"tracking each of said developmental lines to determine the reached checkpoints" carried out in Song 's Fig. 3 which the Examiner also cites for disclosing this last element?

The Examiner cites col 3, lines 58-62 as teaching this setting of check points. At best this section state that a marked or designated activity indicates that the software support document for that activity is available. As stated in col 2, lines 8-23, these support software documentation is often required by law. It is submitted that indicating the existence of documentation for a given activity at a given phase of a single component is not "simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints". Figure 3 in Song at most shows stages in the documentation, of a single developmental line and does not disclose the tracking check point stages in a plurality of developmental lines.

Examiner's Argument:

The Examiner insists that Fig. 3 of Song shows the tracking of check points simultaneously in multiple product developmental lines. In order to read Song on the claims, the Examiner argues (in the bottom paragraph of the final rejection) that there are several components listed in Fig. 2, e.g. Systems Functions, Patient and File Functions,Filming,etc., and that the multiple check points of this plurality of components are then tracked in the columns The description in Song does not support such an of Fig. 3. connection and interpretation of Fig. 2 with respect to Fig. Applicants submit Fig. 3 shows the documentation at 3. multiple development stages of a single component or product. Col 4, lines 53-55, indicates that the Fig. 3 relates to the status of documentation of a highlighted selected component. "Each column in the panel shows the AUS920000234US1

status of the documentation within one development phase"
(col 4, lines 59-60). It is submitted that each column
represents one development phase of a one component, and
that all of the columns in Fig. 3 collectively represent
several developmental stages of that component. Each column
represents a list of the documents which may be available
for that Stage (column). A reading of the headings in Fig.
3 would make it clear to one skilled in the art that
anything analogous to a product development line would be
progressing in the header (X-axis) direction sequence:
Requirement > Concept > Design > Implementation >
Integration as the development line progressed.

It is submitted that, for the reasons set forth hereinabove, the Examiner's difficult interpretation of the general and vague disclosure of Song does not meet the very specific requirements of 35 USC 102 that the reference must clearly teach every element of the invention without modification. It is submitted that Song fails to disclose every element of the invention without modification as required for a rejection under 35 USC 102 of claims 1-5, 8-12, 15-19, 22, 25 and 28.

The rejection of claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 as obvious over Song et al under 35 U.S.C. 103(a) is also respectfully traversed.

Dependent claims 6, 13, and 20 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation when modifying the actions required of checkpoints, the modification may include switching of the actions to other of said plurality of developmental lines. The Examiner concedes that Song does not disclose this but relies on some vague statements

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in Song about changes to contend that such switching is suggested by Song. Applicants can find nothing in Song related to switching of attributes and action between developmental lines. Further, it is submitted that the reason such switching in the present invention may be interactively easily done is that all of the plurality of lines are simultaneously displayed. In Song, e.g. Fig. 3, each of the development lines are individually displayed with a description devoid of any suggestion that attributes or actions may be switched to other unseen developmental lines. Examiner admits that Song does not expressly disclose switching to other development lines but argues that such switching would be obvious. Applicants submit that in view of the vagueness of the Song disclosure, such switching is far from obvious.

Claims 23, 24, 26, 27, 29, and 30 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these set forth an implementation wherein a set of attributes of a checkpoint may be displayed at the checkpoint. The Examiner argues that this is suggested by Fig. and col 4, lines 50-55 in Song. However, the Examiner has already contended that each of the thirty five status boxes in Song's Fig. 3 were checkpoints with Yes/No indicators as to whether the documentation had been developed. The Examiner can not argue now that the same status boxes are now a display of attributes for the thirty five listed status boxes. There is no additional display of attributes in Song as described in the specification of the present invention.

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The rejection of claims 7, 14, and 21 as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a) is also respectfully traversed.

Claims 7, 14, and 21 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation that the means for tracking are remote from the display on which the plurality of product line are displayed and the tracking means communicate the tracked data to the display system where the tracked data is stored. Since Song does not disclose this, the Examiner goes to a combination with Hopwood. In the data tracking and management system of Hopwood, even if the data tracking could arguably be said to be remote from the display on which the data is shown, there appears to be no suggestion that the tracked data is stored in association with this display. In Hopwood, the data tracked remotely from the display appears to also be stored remotely from the display.

Accordingly, it is submitted that Song even when combined with Hopwood still does not suggest the invention defined in claims 7, 14, and 21.

<u>Conclusion</u>

In view of the foregoing, it is submitted that: Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999; Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are unobvious over Song et al. under 35 U.S.C. 103(a); and Claims 7, 14, and 21 are unobvious over Song et al. in

view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

Accordingly, the Board of Appeals is respectfully requested to reverse the final rejection and find claims 1-31 in condition for allowance.

Respectfully submitted Krai !t

Attorney for Applicants Registration No. 19,226 (512) 473-2303

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VIII. Claims on Appeal (Appendix)

A computer controlled display system for tracking the 1 1. development of complex software products having a plurality 2 of developmental lines comprising: 3 4 means for setting in each of said plurality of 5 developmental lines, a sequence of checkpoints; 6 means for tracking each of said developmental lines to 7 determine the reached checkpoints; and means for simultaneously displaying said plurality of 8 developmental lines and indicating said reached checkpoints. 9 The computer controlled display system of claim 1 1 2. 2 further including: means for modifying said developmental lines and said 3 4 checkpoints; and 5 means for displaying said modifications. The computer controlled display system of claim 2 1 3. 2 further including means for displaying at each of said 3 checkpoints, a set of developmental attributes for said 4 checkpoint. The computer controlled display system of claim 3 1 4. 2 further including: 3 means for modifying said developmental attributes for 4 each of said checkpoints; and 5 means for displaying said modifications at each of said 6 checkpoints.

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5. The computer controlled display system of claim 3
 wherein said developmental attributes include actions
 performed in said software product development.

6. The computer controlled display system of claim 5
 wherein said means for modifying said actions switch said
 actions to other of said developmental lines.

7. The computer controlled display system of claim 2
 wherein:

3 said means for tracking are remote from said means for4 displaying,

and said system further includes:

means for storing, in association with said means for
displaying, the data tracked by said means for tracking; and
means for communicating the data tracked to said means
for storing.

8. A method for tracking the development of complex
 software products having a plurality of developmental lines
 on a computer controlled display comprising:

setting in each of said plurality of developmental
lines, a sequence of checkpoints;

6 tracking each of said developmental lines to determine
7 the reached checkpoints; and

8 simultaneously displaying said plurality of

9 developmental lines and indicating said reached checkpoints.

9. The method for tracking of claim 8 further including the
 2 steps of:

3 modifying said developmental lines and said

4 checkpoints; and

5

5

displaying said modifications.

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10. The method for tracking of claim 9 further including
 the step of displaying at each of said checkpoints, a set of
 developmental attributes for said checkpoint.

1 11. The method for tracking of claim 10 further including
 2 the steps of:

3 modifying said developmental attributes of a plurality
4 of said checkpoints; and

5 displaying said modifications at each of said modified6 checkpoints.

1 12. The method for tracking of claim 10 wherein said
 2 developmental attributes include actions performed in said
 3 software product development.

13. The method for tracking of claim 12 wherein said step
 of modifying said actions switches said actions to other of
 said developmental lines.

1 14. The method for tracking of claim 9 wherein:
 said step of tracking is carried out remote from said
 displaying step,

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4 and further including the steps of:

5 storing, in association with said displaying step, the6 data tracked in said tracking step; and

7 communicating the data tracked to said storing step.

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15. A computer program having code recorded on a computer 1 2 readable medium for tracking, on a computer controlled display, the development of complex software products having 3 a plurality of developmental lines comprising: 4 means for setting in each of said plurality of 5 developmental lines, a sequence of checkpoints; 6 7 means for tracking each of said developmental lines to determine the reached checkpoints; and 8 9 means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints. 10 The computer program of claim 15 further including: 1 16. 2 means for modifying said developmental lines and said 3 checkpoints; and means for displaying said modifications. 4 The computer program of claim 16 further including 1 17. means for displaying at each of said checkpoints, a set of 2 developmental attributes for said checkpoint. 3 The computer program of claim 17 further including: 1 18. means for modifying said developmental attributes for 2 3 each of said checkpoints; and means for displaying said modifications at each of said 4 5 checkpoints. The computer program of claim 17 wherein said 1 19. 2 developmental attributes include actions performed in said 3 software product development. The computer program of claim 19 wherein said means for 1 20. modifying said actions switch said actions to other of said 2

3 developmental lines.

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1 21. The computer program of claim 16 wherein:

2 said means for tracking are remote from said means for 3 displaying,

4 and said system further includes:

5 means for storing, in association with said means for 6 displaying, the data tracked by said means for tracking; and 7 means for communicating the data tracked to said means 8 for storing.

A computer controlled display system for tracking the
 building of a program product from a functional
 implementation stage to a complete integrated program
 product comprising:

5 a plurality of developmental lines respectively 6 corresponding to each of a plurality of program components 7 to be integrated into said complete program product; 8 means for setting in each of said plurality of 9 developmental lines, a sequence of checkpoints; 10 means for tracking each of said developmental lines to 11 determine the reached checkpoints; and

means for simultaneously displaying said plurality ofdevelopmental lines and indicating said reached checkpoints.

23. The computer controlled display system of claim 22
 further including means for displaying at each of said
 checkpoints, a set of attributes for said checkpoint related
 to the compatibility functions of said checkpoint line.

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The computer controlled display system of claim 23 1 24. 2 further including: means for modifying said attributes for each of said 3 checkpoints; and 4 means for displaying said modifications at each of said 5 checkpoints. 6 25. A method for tracking, on a computer controlled 1 display, the building of a program product from a functional 2 implementation stage to a complete integrated program 3 product comprising: 4 setting up a plurality of developmental lines 5 respectively corresponding to each of a plurality of program 6 components to be integrated into said complete program 7 8 product; setting up in each of said plurality of developmental 9 lines, a sequence of checkpoints; 10 tracking each of said developmental lines to determine 11 the reached checkpoints; and 12 simultaneously displaying said plurality of 13 developmental lines and indicating said reached checkpoints. 14 The method for tracking of claim 25 further including 26. 1 the step of displaying at each of said checkpoints, a set of 2 attributes for said checkpoint related to the compatibility 3 functions of said checkpoint line. 4 The method for tracking of claim 26 further including 27. 1 2 the steps of: modifying said attributes for each of said checkpoints; 3 4 and displaying said modifications at each of said 5 checkpoints. 6

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28. A computer program having code recorded on a computer 1 readable medium for tracking, on a computer controlled 2 3 display, the building of a program product from a functional implementation stage to a complete integrated program 4 5 product comprising: means for tracking a plurality of developmental lines 6 7 respectively corresponding to each of a plurality of program components to be integrated into said complete program 8 product; 9 means for setting in each of said plurality of 10 11 developmental lines, a sequence of checkpoints; means for determining the reached checkpoints in each 12 of said plurality of developmental lines; and 13 means for simultaneously displaying said plurality of 14 developmental lines and indicating said reached checkpoints. 15 The computer program of claim 28 further including 29. 1 2 means for displaying at each of said checkpoints, a set of attributes for said checkpoint related to the compatibility 3 functions of said checkpoint line. 4

30. The computer program of claim 29 further including:
 means for modifying said attributes for each of said
 checkpoints; and

4 means for displaying said modifications at each of said 5 checkpoints.

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31. A method for tracking the development of complex software products having a plurality of developmental lines on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints;

tracking each of said developmental lines to determine the reached checkpoints;

modifying said developmental lines and said checkpoints including the switching of an action required at the checkpoint to a checkpoint in another developmental line;

simultaneously displaying, remote from said tracking, said plurality of developmental lines indicating said reached checkpoints, and modifications to said developmental lines and said checkpoints;

storing, in association with said displaying step, the data tracked in said tracking step; and

communicating the data tracked to said storing step.

IX. Evidence

There is no evidence presented.

X. Related Proceedings

None

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Group Art Unit: 2192
	:	Examiner: J. J. Romano
Arnold J. Daks et al.	:	Intellectual Property
Serial No: 09/666,004	:	Law Department - 4054
Filed: 08/28/001	:	International Business
Title: A COMPUTER CONTROLLED	:	Machines Corporation
DISPLAY SYSTEM FOR TRACKING	:	11400 Burnet Road
THE DEVELOPMENT OF SOFTWARE	:	Austin, Texas 78758
PRODUCTS HAVING A PLURALITY	:	Customer No. 32,329
OF DEVELOPMENT LINES THROUGH	:	
THE MONITORING OF SEQUENCES	:	
OF CHECKPOINTS RESPECTIVELY	:	
IN SAID LINES , / ,	:	
Date: 3/06/06	:	
/ /		

BRIEF ON APPEAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an Appeal from the Final Rejection of Claims 1-31 of this Application. An Appendix containing a copy of each of the Claims is attached.

I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

II. Related Appeals and Interferences None

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III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 31 claims in this Application.

B. STATUS OF ALL THE CLAIMS

- 1. Claims cancelled: None.
- 2. Claims withdrawn from consideration but not cancelled: None.
- 3. Claims pending: 1-31.
- 4. Claims allowed: None.
- 5. Claims rejected: 1-31.

C. CLAIMS ON APPEAL

Claims on appeal: Claims 1-31.

IV. Status of Amendment

No amendments have been filed after Final Rejection.

V. Summary of Invention

Claim 1 which is annotated with respect to the Specification and Drawings has the same elements as all of the independent claims herein: 1, 8, 15, 22, 25, 28, and 31.

 A computer controlled display system (Fig. 3, described on Page 9, lines 3-18, for tracking the development of complex software products having a plurality of developmental lines (Fig. 3 lines 51, described on page 9, line 32 to page 10, line 5) comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints; (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13)

means for tracking each of said developmental lines to determine the reached checkpoints; (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18); and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4).

In addition, dependent claims 6, 13, and 20, to be argued separately, set forth an implementation: when the checkpoints are modified, the modification may involve switching of actions from one of the plurality of lines to another (page 11, lines 9-11, referring to Fig. 6 and page 12, lines 9-12, referring to Fig. 9, steps 76-78).

Dependent claims 23, 24, 26, 27, 29, and 30, to be argued separately, describe an implementation wherein a set of attributes of the checkpoint are displayed at the checkpoint (page 12, lines 7-9 referring to Fig. 9, step 76).

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Dependent claims 7, 14, and 21 to be argued separately set forth a limitation wherein the means for tracking are remote from the display on which the plurality of lines are displayed (page 7, lines 7-12 referring to Fig. 10

VI. Grounds of Rejection

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are rejected as anticipated under 35 USC 102(b) by Song et al. US5,949,999. Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are

rejected as obvious over Song et al. under 35 U.S.C. 103(a). Claims 7, 14, and 21 are rejected as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

VII. Argument

Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999.

Song is not an anticipatory reference under 35 USC 102. In order to reject under 35 USC 102, the reference must teach every element of the invention without modification. Applicants submit that Song does not do this. The present invention claims the combination, in tracking the development of software products, (as set forth in claim 1) of means for setting and displaying a sequence of checkpoints in each of a plurality of developmental lines and means for determining which checkpoints have reached in each developmental line and indicating the reached checkpoints on the simultaneous display of a plurality developmental development lines. While Song is concerned with software development and may permit user access to what may be considered developmental lines, Song does not appear to be concerned with a collective display of a plurality of

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developmental lines each with indicated reached and unreached checkpoints.

<u>Please consider typical claim 1 in this connection:</u>

1. A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines comprising: means for <u>setting in each of said plurality of</u> <u>developmental lines, a sequence of checkpoints;</u> means for <u>tracking each</u> of said developmental lines <u>to</u> <u>determine the reached checkpoints</u>; and means for <u>simultaneously displaying</u> said plurality of <u>developmental lines and <u>indicating said reached checkpoints</u>.</u>

Song does not teach setting in each of a plurality of developmental lines a sequence of checkpoints. The Examiner points to col 3, lines 57 and 58. This a very vague citation. It deals with a procedure for producing software documents for a software development and testing process. There is some very general statement about defining procedures and documents required during the project execution. It is submitted that such a vague and general statement does not meet the 35 USC 102 requirement that the reference has to teach without modification the claimed element: "setting in each of said plurality of developmental lines, a sequence of checkpoints"

The Examiner also cites Fig. 3 in Song for this teaching. Fig. 3 has a very short and general description of the measurement of a variety of elements in a software support document at various stages in the development of a product component, and little else. It is not seen what the Examiner regards as his check points. Does the Examiner intend that every element of every stage in the development of the product component is a check point? Is so, how is

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"tracking each of said developmental lines to determine the reached checkpoints" carried out in Song 's Fig. 3 which the Examiner also cites for disclosing this last element?

The Examiner cites col 3, lines 58-62 as teaching this setting of check points. At best this section state that a marked or designated activity indicates that the software support document for that activity is available. As stated in col 2, lines 8-23, these support software documentation is often required by law. It is submitted that indicating the existence of documentation for a given activity at a given phase of a single component is not "simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints". Figure 3 in Song at most shows stages in the documentation, of a single developmental line and does not disclose the tracking check point stages in a plurality of developmental lines.

Examiner's Argument:

The Examiner insists that Fig. 3 of Song shows the tracking of check points simultaneously in multiple product developmental lines. In order to read Song on the claims, the Examiner argues (in the bottom paragraph of the final rejection) that there are several components listed in Fig. 2, e.g. Systems Functions, Patient and File Functions, ... Filming, etc., and that the multiple check points of this plurality of components are then tracked in the columns of Fig. 3. The description in Song does not support such an connection and interpretation of Fig. 2 with respect to Fig. Applicants submit Fig. 3 shows the documentation at 3. multiple development stages of a single component or product. Col 4, lines 53-55, indicates that the Fig. 3 relates to the status of documentation of a highlighted selected component. "Each column in the panel shows the AUS920000234US1

status of the documentation within one development phase" (col 4, lines 59-60). It is submitted that each column represents one development phase of a one component, and that all of the columns in Fig. 3 collectively represent several developmental stages of that component. Each column represents a list of the documents which may be available for that Stage (column). A reading of the headings in Fig. 3 would make it clear to one skilled in the art that anything analogous to a product development line would be progressing in the header (X-axis) direction sequence: Requirement > Concept > Design > Implementation > Integration as the development line progressed.

It is submitted that, for the reasons set forth hereinabove, the Examiner's difficult interpretation of the general and vague disclosure of Song does not meet the very specific requirements of 35 USC 102 that the reference must clearly teach every element of the invention without modification. It is submitted that Song fails to disclose every element of the invention without modification as required for a rejection under 35 USC 102 of claims 1-5, 8-12, 15-19, 22, 25 and 28.

The rejection of claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 as obvious over Song et al under 35 U.S.C. 103(a) is also respectfully traversed.

Dependent claims 6, 13, and 20 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation when modifying the actions required of checkpoints, the modification may include switching of the actions to other of said plurality of developmental lines. The Examiner concedes that Song does not disclose this but relies on some vague statements

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in Song about changes to contend that such switching is suggested by Song. Applicants can find nothing in Song related to switching of attributes and action between developmental lines. Further, it is submitted that the reason such switching in the present invention may be interactively easily done is that all of the plurality of lines are simultaneously displayed. In Song, e.g. Fig. 3, each of the development lines are individually displayed with a description devoid of any suggestion that attributes or actions may be switched to other unseen developmental lines. Examiner admits that Song does not expressly disclose switching to other development lines but argues that such switching would be obvious. Applicants submit that in view of the vagueness of the Song disclosure, such switching is far from obvious.

Claims 23, 24, 26, 27, 29, and 30 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these set forth an implementation wherein a set of attributes of a checkpoint may be displayed at the checkpoint. The Examiner argues that this is suggested by Fig. and col 4, lines 50-55 in Song. However, the Examiner has already contended that each of the thirty five status boxes in Song's Fig. 3 were checkpoints with Yes/No indicators as to whether the documentation had been developed. The Examiner can not argue now that the same status boxes are now a display of attributes for the thirty five listed status boxes. There is no additional display of attributes in Song as described in the specification of the present invention.

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The rejection of claims 7, 14, and 21 as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a) is also respectfully traversed.

Claims 7, 14, and 21 are submitted to be patentable over Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation that the means for tracking are remote from the display on which the plurality of product line are displayed and the tracking means communicate the tracked data to the display system where the tracked data is stored. Since Song does not disclose this, the Examiner goes to a combination with Hopwood. In the data tracking and management system of Hopwood, even if the data tracking could arguably be said to be remote from the display on which the data is shown, there appears to be no suggestion that the tracked data is stored in association with this display. In Hopwood, the data tracked remotely from the display appears to also be stored remotely from the display.

Accordingly, it is submitted that Song even when combined with Hopwood still does not suggest the invention defined in claims 7, 14, and 21.

<u>Conclusion</u>

In view of the foregoing, it is submitted that: Claims 1-5, 8-12, 15-19, 22, 25 and 28 are not anticipated under 35 USC 102(b) by Song et al. US5,949,999; Claims 6, 13, 20, 23, 24, 26, 27, 29, and 30 are unobvious over Song et al. under 35 U.S.C. 103(a); and Claims 7, 14, and 21 are unobvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

Accordingly, the Board of Appeals is respectfully requested to reverse the final rejection and find claims 1-31 in condition for allowance.

Respectfully submitted ٢t.

Attorney for Applicants Registration No. 19,226 (512) 473-2303

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VIII. Claims on Appeal (Appendix)

1. A computer controlled display system for tracking the 1 development of complex software products having a plurality 2 3 of developmental lines comprising: 4 means for setting in each of said plurality of developmental lines, a sequence of checkpoints; 5 means for tracking each of said developmental lines to 6 7 determine the reached checkpoints; and 8 means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints. 9 1 The computer controlled display system of claim 1 2. 2 further including: 3 means for modifying said developmental lines and said 4 checkpoints; and 5 means for displaying said modifications. The computer controlled display system of claim 2 1 3. 2 further including means for displaying at each of said checkpoints, a set of developmental attributes for said 3 4 checkpoint. The computer controlled display system of claim 3 1 4. 2 further including: means for modifying said developmental attributes for 3 each of said checkpoints; and 4 5 means for displaying said modifications at each of said 6 checkpoints.

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5. The computer controlled display system of claim 3
 wherein said developmental attributes include actions
 performed in said software product development.

6. The computer controlled display system of claim 5
 wherein said means for modifying said actions switch said
 actions to other of said developmental lines.

7. The computer controlled display system of claim 2
 wherein:

3 said means for tracking are remote from said means for 4 displaying,

5 and said system further includes:

means for storing, in association with said means for
displaying, the data tracked by said means for tracking; and
means for communicating the data tracked to said means
for storing.

1 8. A method for tracking the development of complex 2 software products having a plurality of developmental lines on a computer controlled display comprising: 3 setting in each of said plurality of developmental 4 5 lines, a sequence of checkpoints; 6 tracking each of said developmental lines to determine 7 the reached checkpoints; and 8 simultaneously displaying said plurality of 9 developmental lines and indicating said reached checkpoints. 1 The method for tracking of claim 8 further including the 9. 2 steps of: 3 modifying said developmental lines and said 4 checkpoints; and 5 displaying said modifications. AUS920000234US1 12

10. The method for tracking of claim 9 further including
 the step of displaying at each of said checkpoints, a set of
 developmental attributes for said checkpoint.

1 11. The method for tracking of claim 10 further including
 2 the steps of:

3 modifying said developmental attributes of a plurality
4 of said checkpoints; and

5 displaying said modifications at each of said modified6 checkpoints.

1 12. The method for tracking of claim 10 wherein said
 2 developmental attributes include actions performed in said
 3 software product development.

13. The method for tracking of claim 12 wherein said step
 of modifying said actions switches said actions to other of
 said developmental lines.

1 14. The method for tracking of claim 9 wherein:

2 said step of tracking is carried out remote from said3 displaying step,

4 and further including the steps of:

storing, in association with said displaying step, the
data tracked in said tracking step; and

7 communicating the data tracked to said storing step.

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A computer program having code recorded on a computer 15. 1 2 readable medium for tracking, on a computer controlled display, the development of complex software products having 3 a plurality of developmental lines comprising: 4 means for setting in each of said plurality of 5 6 developmental lines, a sequence of checkpoints; means for tracking each of said developmental lines to 7 determine the reached checkpoints; and 8 means for simultaneously displaying said plurality of 9 developmental lines and indicating said reached checkpoints. 10 The computer program of claim 15 further including: 16. 1 means for modifying said developmental lines and said 2 checkpoints; and 3 means for displaying said modifications. 4 The computer program of claim 16 further including 1 17. means for displaying at each of said checkpoints, a set of 2 3 developmental attributes for said checkpoint. The computer program of claim 17 further including: 1 18. means for modifying said developmental attributes for 2 3 each of said checkpoints; and means for displaying said modifications at each of said 4 checkpoints. 5 The computer program of claim 17 wherein said 19. 1 developmental attributes include actions performed in said 2 software product development. 3 The computer program of claim 19 wherein said means for 20. 1 modifying said actions switch said actions to other of said 2 3

developmental lines.

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1 21. The computer program of claim 16 wherein:

2 said means for tracking are remote from said means for displaying, 3 4

and said system further includes:

5 means for storing, in association with said means for displaying, the data tracked by said means for tracking; and 6 7 means for communicating the data tracked to said means 8 for storing.

A computer controlled display system for tracking the 1 22. 2 building of a program product from a functional implementation stage to a complete integrated program 3 4 product comprising:

5 a plurality of developmental lines respectively 6 corresponding to each of a plurality of program components to be integrated into said complete program product; 7 · 8 means for setting in each of said plurality of 9 developmental lines, a sequence of checkpoints;

means for tracking each of said developmental lines to 10 11 determine the reached checkpoints; and

12 means for simultaneously displaying said plurality of 13 developmental lines and indicating said reached checkpoints.

The computer controlled display system of claim 22 1 23. 2 further including means for displaying at each of said checkpoints, a set of attributes for said checkpoint related 3 4 to the compatibility functions of said checkpoint line.

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The computer controlled display system of claim 23 1 24. 2 further including: means for modifying said attributes for each of said 3 checkpoints; and 4 means for displaying said modifications at each of said 5 6 checkpoints. A method for tracking, on a computer controlled 1 25. display, the building of a program product from a functional 2 implementation stage to a complete integrated program 3 product comprising: 4 setting up a plurality of developmental lines 5 respectively corresponding to each of a plurality of program 6 components to be integrated into said complete program 7 8 product; setting up in each of said plurality of developmental 9 lines, a sequence of checkpoints; 10 tracking each of said developmental lines to determine 11 the reached checkpoints; and 12 simultaneously displaying said plurality of 13 developmental lines and indicating said reached checkpoints. 14 The method for tracking of claim 25 further including 26. 1 the step of displaying at each of said checkpoints, a set of 2 attributes for said checkpoint related to the compatibility 3 functions of said checkpoint line. 4 The method for tracking of claim 26 further including 1 27. the steps of: 2 modifying said attributes for each of said checkpoints; 3 4 and displaying said modifications at each of said 5 6 checkpoints.

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A computer program having code recorded on a computer 1 28. readable medium for tracking, on a computer controlled 2 display, the building of a program product from a functional 3 4 implementation stage to a complete integrated program product comprising: 5 means for tracking a plurality of developmental lines 6 respectively corresponding to each of a plurality of program 7 components to be integrated into said complete program 8 9 product; means for setting in each of said plurality of 10 developmental lines, a sequence of checkpoints; 11 12 means for determining the reached checkpoints in each of said plurality of developmental lines; and 13 means for simultaneously displaying said plurality of 14 developmental lines and indicating said reached checkpoints. 15 The computer program of claim 28 further including 29. 1 means for displaying at each of said checkpoints, a set of 2 attributes for said checkpoint related to the compatibility 3

4 functions of said checkpoint line.

30. The computer program of claim 29 further including:
 means for modifying said attributes for each of said
 checkpoints; and

4 means for displaying said modifications at each of said 5 checkpoints.

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31. A method for tracking the development of complex software products having a plurality of developmental lines on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints;

tracking each of said developmental lines to determine the reached checkpoints;

modifying said developmental lines and said checkpoints including the switching of an action required at the checkpoint to a checkpoint in another developmental line;

simultaneously displaying, remote from said tracking, said plurality of developmental lines indicating said reached checkpoints, and modifications to said developmental lines and said checkpoints;

storing, in association with said displaying step, the data tracked in said tracking step; and

communicating the data tracked to said storing step.

IX. Evidence

There is no evidence presented.

X. Related Proceedings

None

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